Anticipation Guide

States of Matter

|  |  |  |  |  |  |
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| **Agree** | **Disagree** | **Changes in States of Matter** | **True** | **False** | **Evidence/Explanation** |
|  |  | There are three states of matter: solid, liquid, and gas |  |  |  |
|  |  | Matter is made up of atoms and the way these atoms interact determines an objects state |  |  |  |
|  |  | Solids have a definite volume, but not a definite shape |  |  |  |
|  |  | The atoms in a solid vibrate in place |  |  |  |
|  |  | Liquids have a definite shape, but not a definite volume |  |  |  |
|  |  | The atoms of a liquid move completely free of each other |  |  |  |
|  |  | Gases do not have definite shapes or volumes |  |  |  |
|  |  | The atoms of a gas are held close to each other, but can slide around each other |  |  |  |
|  |  | The slower atoms are moving, the more energy they have |  |  |  |
|  |  | Particles (atoms) in a liquid have more energy than the particles in a gas |  |  |  |
|  |  | Kinetic energy is the energy of objects in motion |  |  |  |